Home Assignment

5/9/22

Elements, Compounds and Mixtures

(1) Expand IUPAC

Ans) IUPAC stands for International Union of Pure and Applied Chemistry. It is a systematic method of naming compounds and its known as the IUPAC system of nomenclature.

(2) Differentiate between compound and mixture

Compound	Mixture
(1) A compound is a pure substance.	(1) A mixture is an impure substance.
(2) Compounds are always homogenous	(2) Mixtures may be homogenous or heterogenous.
(3) Formation of a compound involves change in energy.	(3) Formation of a mixture does not involve any change in energy.
(4) Compounds have definite molecular formula. Eg - a molecule of water is represented by H_2O.	(4) Mixtures have no definite formulae. (5) Eg. Air.

Q) What do you mean by separation? On what factors the principle of separation depends?

Ans) The process by which constituents of a mixture are set apart from one another to get pure substances, is called separation.

The principle of separation depends upon the

- type of mixture
- characteristics properties of mixture, such as size, shape, colour, density, melting point, etc.

Q) Mention any three characteristics of a mixtures.

Ans) i) In mixtures, components are loosely held together without any chemical force acting on them or between them.

ii) Mixtures don't have any fixed

amount of components i.e. they can have their components in varying proportions.

(ii) Mixtures don't have any specific set of properties.

(5) ~~What are~~

(5) What are metalloid? Give examples.

Ans) Metalloids are typically semiconductors which means that they insulate to and conduct electricity. They are also called as semi metals. Example - Boron, Silicon etc.

(6) Write a short note on noble gases

Ans) The noble gases are the elements that belong to group 18 of the modern periodic table. They include helium, neon, argon, krypton, xenon, and usually radon and tha exhibit great stability and extremely low reaction rates, also called inert gases.